### **CLAIMS**

## I Claim:

- 1. (Amended) A method for scheduling independent and dependant jobs and/or work consistent with an entity's strategic objective, wherein said method comprises the steps of:
  - a. defining a plurality of strategic objectives;
  - b. prioritizing said strategic objectives;
  - c. selecting the primary strategic objective from said prioritized strategic objectives;
  - d. listing a plurality of measures for said primary strategic objective;
  - e. selecting one of said measures from said list of a plurality of measures to be the primary strategic objective measure;
  - f. listing a plurality of measures to be used for scheduling said jobs and/or work consistent with said primary strategic objective measure;
  - g. selecting a primary measure for said scheduling of said jobs and/or work consistent with said primary strategic objective measure from said listing of said plurality of measures to be used for scheduling said jobs and/or work;
  - h. listing a plurality of constraints categories for scheduling said jobs and/or work;
  - i. selecting a constraint category from said list of a plurality of constraint categories by which said jobs and/or work will be scheduled;
  - j. listing a plurality of constraints within said selected constraint category and prioritizing the order of said constraints within said selected constraint category to schedule said jobs and/or work by;
  - k. using said primary measure for said scheduling of said jobs and/or work, calculate said work schedule measure for each said job and/or work in the work queue for the first said prioritized constraint within said selected constraint category;
  - 1. prioritizing said calculated work schedule measures in (k) above by largest work schedule measure first for said first prioritized constraint;
  - m. scheduling all of said independent jobs and/or work by said prioritized calculated work schedule measures, then scheduling all of said dependant jobs and/or work by said prioritized calculated work schedule measures; and

- n. repeating steps k through m for each said prioritized constraints until all of said prioritized constraints and all of said jobs and/or work have been scheduled.
- 2. (Amended) A method as recited in claim 1, wherein said method of prioritizing-the constraints in a constraint category comprises the additional steps of:
  - a. as an independent and/or dependant job and/or work is scheduled, removing said scheduled job and/or work from said work queue; and
  - b. adding said calculated work schedule measure from said scheduled independent and/or dependant job and/or work to each said independent and/or dependant jobs and/or work remaining in said work queue.
- 3. (Withdrawn)
- 4. (Withdrawn)
- 5. (Amended) An apparatus for scheduling work consistent with an entity's strategic objective, wherein said apparatus includes:
  - a. a memory that stores computer-readable code, said memory containing:
    - i. a first measure for said entity's strategic objective;
    - ii. a listing of all of the independent and dependant work in said entity's work queue;
    - iii. a second measure for scheduling said independent and dependant work
    - iv. a prioritized listing of constraints for said independent and dependant work; and
    - iv. said entity's Management Information System (MIS);
  - b. a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:
    - i. calculate the product of said first measure and constraints for each said constraint for the planning period;
    - ii. prioritize said calculated products of said first measure and said constraints by largest value first;

- iii. calculate the work schedule measure as the product of said second measure and the list of the independent and dependant work for each job and/or work in the work queue for said prioritized products of said constraints;
- iv. schedule all said independent jobs;
- v. sort said dependant jobs and/or work of said largest value of said prioritized calculated product of said first measure and said constraints based upon said work schedule measures with said jobs and/or work having the largest said product of said second measure and the list of the independent and dependant work first; vi. scheduled said dependant jobs and/or work sorted in step v above in
- vi. schedule<del>d</del> said dependant jobs and/or work sorted in step v above in the order sorted in v above; and
- vii. repeating steps i through vi until all said constraints and all said jobs and/or work in said work queue has been scheduled for the planning period.
- 6. (Amended) An apparatus as recited in claim 5, wherein the said apparatus includes a said processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:
  - a. as an independent and/or dependant job and/or work is scheduled, remove said independent and/or dependant scheduled job and/or work from the said work queue; and
  - b. add said calculated work schedule measure of said scheduled job and/or work to said calculated work schedule measure of each said independent and/or dependant jobs and/or work remaining in said work queue.
- 7. (Withdrawn)
- 8. (Withdrawn)
- 9. (Amended) A computer-readable medium encoded with a computer program for determining the sequence for scheduling activities or work in the work queue that is

consistent with and supportive of the entity's primary strategic objective, wherein said computer program comprises:

- a. a first measure for said entity's primary strategic objective;
- b. a listing of all of the independent and dependant activities or work in said entity's work queue;
- a second measure for scheduling said independent and dependant activities or work;
- d. a prioritized listing of constraints for said independent and dependant activities or work;
- e. said entity's Management Information System (MIS);
- f. the program code to calculation the product of said first measure and said constraints for the planning period;
- g. the program code to\_prioritize said product of said first measure and said constraints by largest said product first for scheduling work by;
- h. the program code to calculate the work schedule measure as the product of said second measure and the list of said independent and/or dependant work for each said activity or work in the work queue for said prioritized products of said constraints:
- i. the program code to schedule all of said independent activities or work;
- j. the program code to sort said dependant activities or work by said largest value of said prioritized calculated product of said first measure and said constraints based upon said work schedule measures with said activities or work having the largest said product of said second measure and the list of said independent and dependant activities or work first;
- k. the program code to schedule said dependant activities or work sorted in step j above in the order sorted in step j above; and
- 1. repeating steps f through k for each said constraints until all said constraints and all said activities or work in said work queue have been scheduled for the planning period.

- 10. (Amended) A computer program as recited in claim 9, wherein the computer program further:
  - a. the computer code to said independent or dependant activity or work from said work queue once said independent or dependant activity or work is scheduled;
     and
  - b. the computer code to add said work schedule measure of said scheduled activity and/or work to said calculated work schedule measure of each said activities and/or work remaining in said work queue.
- 11. (Withdrawn)
- 12. (Withdrawn)
- 13. (Withdrawn)
- 14. (Withdrawn)
- 15. (Withdrawn)
- 16. (Withdrawn)

### **CLAIMS**

## I Claim:

- 1. (Amended) A method for scheduling <u>independent and dependant jobs and/or activities</u> and/or work consistent with an entity's strategic objective, wherein said method comprises the steps of:
  - a. defining a plurality of the strategic objectives;
  - b. prioritizing the said strategic objectives;
  - c. selecting the primary strategic objective <u>from said prioritized strategic</u> objectives;
  - d. listing the possible a plurality of measures for the said primary strategic objective;
  - e. selecting <u>one of said measures from said list of a plurality of measures to be</u> the primary strategic objective measure;
  - f. scheduling all of the said independent jobs and/or orders;
  - gf. defining listing the possible a plurality of measures to be used for scheduling said jobs and/or work consistent with the said primary strategic objective measure; hg. selecting a primary measure for said scheduling of said jobs and/or work consistent with the said primary strategic objective measure from said listing of said
  - <u>ih</u>. <u>defining the possible listing a plurality of constraints categories for scheduling said jobs and/or work;</u>
  - <u>ji</u>. selecting the <u>a constraint category from said list of a plurality of constraint categories</u> by which said <u>jobs and/or work will be scheduled;</u>

plurality of measures to be used for scheduling said jobs and/or work;

- kj. <u>listing a plurality of constraints within said selected constraint category and</u> prioritizeing the order of the <u>said constraints within said selected constraint category</u> to schedule said <u>jobs and/or work by</u>;
  - <u>lk.</u> using said primary measure for said scheduling of said jobs and/or work, calculatinge the said work schedule measure for each said job and/or work in the work queue for the <u>first</u> said prioritized constraint <u>within said selected constraint</u> category;
  - ml. prioritizing said calculated work schedule measures in (k) above by largest work schedule measure first for said first prioritized constraint;

- m. scheduling all of said independent jobs and/or work by said prioritized calculated work schedule measures, then scheduling all of said sorting the dependant jobs and/or work orders by said prioritized calculated work schedule measures based upon the said work schedule measures with the said job and/or order that has the largest positive impact on the said work schedule measure first; and

  n. scheduling the job and/or order with the said largest positive impact on the said work schedule measure on the said prioritized constraint first; and

  on. repeating steps k through n m for each of the said prioritized constraints until all of the said prioritized constraints and all of the said jobs and/or orders work have been scheduled.
- 2. (Amended) A method as recited in claim 1, wherein the said method of prioritizing-the order of the constraints in a constraint category comprises the additional steps of:
  - a. <u>as an independent and/or dependent job and/or work is scheduled, removing the</u> said scheduled job and/or <u>order work from the</u> said work queue; and
  - b. adding the impact of the said <u>calculated</u> work schedule measure from the said scheduled <u>independent and/or dependent</u> job and/or order <u>work</u> to the <u>each</u> said impact of each of the said <u>independent and/or dependent</u> jobs and/or orders <u>work</u> remaining in the said work queue.
- 3. (Withdrawn)
- 4. (Withdrawn)
- 5. (Amended) An apparatus for scheduling work consistent with an entity's strategic objective, wherein said apparatus includes:
  - a. a memory that stores computer-readable code, said memory containing:
    - i. a first measure for said entity's strategic objective;
    - ii. a listing of all of the independent and dependant work in said entity's work queue;
    - iii. a second measure for scheduling said independent and dependant work

- iv. a prioritized listing of constraints for said independent and dependant work; and
- iv. said entity's Management Information System (MIS);
- b. a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:
  - i. calculate the <u>product of said first measure and constraints desired strategic</u> objective result measure for each <u>said constraint for the planning period</u>;
  - ii. prioritize the said calculated products of said first measure and said constraints by largest value first strategic objective result measures for scheduling work;
  - iii. calculate the work schedule measure <u>as the product of said second measure</u> and the list of the independent and dependant work for each job and/or order work in the work queue for the <u>said prioritized products of said constraints</u>;
  - iv. schedule all of the said independent jobs;
  - v. sort the <u>said</u> dependant jobs and/or <del>orders</del> <u>work</u> of the <u>said largest value of</u> <u>said prioritized calculated product of said first measure and said constraints</u> <u>highest priority constraint</u> based upon the said work schedule measures with the said jobs and/or <u>orders</u> <u>work</u> having the largest <u>said product of said second</u> <u>measure and the list of the independent and dependant work positive impact on the said work schedule measure</u> first;
  - vi. scheduled the said dependant jobs and/or order work sorted in step v above in the order sorted in v above with the said largest positive impact first; and vii. repeating steps i through vi until all of the said constraints and all of the said jobs and/or orders work in said work queue haves been scheduled for the planning period.
- 6. (Amended) An apparatus as recited in claim 5, wherein the said apparatus includes a said processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:
  - a. <u>as an independent and/or dependant job and/or work is scheduled,</u> remove the said <u>independent and/or dependant</u> scheduled job and/or <u>order work</u> from the said work queue; and

- b. add the said <u>calculated work schedule measure impact</u> of the said scheduled job and/or order <u>work</u> to the said <u>calculated work schedule measure impact</u> of <u>each said</u> the <u>independent and/or dependant jobs and/or orders work remaining in the said work job and/or order queue.</u>
- 7. (Withdrawn)
- 8. (Withdrawn)
- 9. (Amended) A computer-readable medium encoded with a computer program embodied on a computer readable medium for determining the sequence or order for scheduling activities or work in the work queue that is consistent with and supportive of the entity's primary strategic objective such that the operational side of the entity is supporting and consistent with the said strategic direction of the entity, wherein said computer program determination comprises a data structure instantiating code segment that establishes a storage record in memory having:
  - a. a first measure for said entity's primary strategic objective;
  - b. a listing of all of the independent and dependant activities or work in said entity's work queue;
  - c. a second measure for scheduling said independent and dependant activities or work;
  - d. a prioritized listing of constraints for said independent and dependant activities or work;
  - e. said entity's Management Information System (MIS);
  - af. the program code to calculations the product of said first measure and said constraints for the planning period for the primary strategic objective measure and for the work schedule measure that are consistent;
  - bg. the program code to prioritized said product of said first measure and said constraints by largest said product first for scheduling work by;
  - eh. the <u>program code to calculated the</u> work schedule measure <u>as the product of said</u> second measure and the list of said independent and/or dependant work for each

- said activity or work in the work queue schedule for the said prioritized products of said constraints;
- di. the program code to schedule all of said independent activities or work a work schedule of the dependant activities or work in the said work schedule, sorted by the activity or work with the largest impact on the said work schedule measure of the said prioritized constraints first; and
- j. the program code to sort said dependant activities or work by said largest value of said prioritized calculated product of said first measure and said constraints based upon said work schedule measures with said activities or work having the largest said product of said second measure and the list of said independent and dependant activities or work first;
- k. the program code to schedule said dependant activities or work sorted in step j above in the order sorted in step j above; and
  - el. repeating steps if through vik for each of the said constraints until all of the said constraints and all of the said activities or work in said work queue have been scheduled for the planning period.
- 10. (Amended) A computer program embodied on a computer-readable medium as recited in claim 9, wherein the computer program further comprises said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory that:
  - a. the computer code to said independent or dependant activity or work from said
     work queue once said independent or dependant activity or work is scheduled has
     removed the scheduled activity or work; and
  - b. the computer code to adds the impact of the said work schedule measure of from the said scheduled activity and/or work to the said calculated work schedule measure impact of each of the said activities and/or work remaining in the said work queue.

# 11. (Withdrawn)

- 12. (Withdrawn)
- 13. (Withdrawn)
- 14. (Withdrawn)
- 15. (Withdrawn)
- 16. (Withdrawn)